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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,419	07/23/2003	Mark A. Brick	GRTEX 122	9173
2555	7590	06/14/2005	EXAMINER	
KREMBLAS, FOSTER, PHILLIPS & POLLICK 7632 SLATE RIDGE BOULEVARD REYNOLDSBURG, OH 43068			TRIEU, THERESA	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/625,419	BRICK ET AL.	
	Examiner	Art Unit	
	Theresa Trieu	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Oct. 16, 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>July 23, 2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION*Drawings*

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "A-A; B-B" (see Fig. 1) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 3, 13 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 3, 13 and 24, the term "can" render the claim indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-10, 22-26 and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Kapur et al. (Kapur) (Patent Number 5,037,283).

Regarding claims 1-3 and 22-24, as shown in Figs. 1 and 2, Kapur discloses a flow divider for receiving fluent matter from at least one source and dividing the fluent matter substantially equally among a plurality of destinations, the flow divider comprising: a housing (7); first/second/third chamber (2, 3, 4) in the housing, the first/second/third chamber being defined by a first/second/third radially inwardly facing surface and a first/second/third wall, the first/second/third chamber having an inlet (70, 48, 74) in fluid communication with said at least one source and an outlet (73, 49, 77) in fluid communication with a first one of said plurality of destinations; a first/second/third cylindrical hub (27, 28, 29) rotatably mounted in the first/second/third chamber, a first/third/fifth (21, 23, 25) radial slot extending through the

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first/second/third hub, and a second/fourth/sixth radial slot (22, 24, 26) extending through the first/second/third hub transverse to the first/third/fifth slot (21, 23, 25); a first/third/fifth (15, 17, 19) vane slidably mounted in the first/third/fifth slot and having opposite vane ends seating against the first/second/third radially inwardly facing surface; a second/fourth/sixth vane (16, 18, 20) slidably mounted in the second/fourth/sixth slot and having opposite vane ends seating against the first/second/third radially inwardly facing surface.

Regarding claims 4, 5, 8-10, 25, 26 and 29-31, Kapur discloses the inlets (70, 48, 74) and the outlets (73, 49, 77) are cavities formed in the respective radially inwardly facing surfaces, and each of said cavities is in fluid communication with a corresponding passage formed through the housing; a longitudinal passage (not numbered; however, clearly seen in Fig. 1) formed through the housing (7), the passage being in fluid communication with each inlet and the source; a first/second end cap (not numbered; however, clearly seen in Fig. 1) being mounted to a first/second end of the housing (7), the end caps forming closures for the chambers; the first end cap has a recess (not numbered; however, clearly seen in Fig. 1) for receiving at least one protrusion formed on one of the hubs (27, 28, 29); each of said hubs has a reduced-diameter necked region forming a shoulder (see Fig. 4), and an aperture is formed in each wall at each chamber for rotatably receiving said necked region of a corresponding hub (27, 28, 29).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 6, 7, 16, 17, 21, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapur '283 in view of Stormer (Patent Number 949,638).

Kapur discloses the invention as recited above; however, Kapur fails to disclose a connection between the first and second hub.

Regarding claims 6, 7, 16, 17, 21, 27 and 28, as shown in Figs. 1, 8 and 9, Stormer teaches that it is conventional in the art to utilize the first and second hubs (41, 40) are drivingly linked by at least one protrusion (38) extending from the second hub (48) into at least one corresponding recess (39) formed in the first hub; at least one protrusion (38) further comprising at least one longitudinal tang extending from one end of the second hub (48), and said corresponding recess (39) further comprising at least one longitudinal slot formed in one end of the first hub (41). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the connection between the first and second hub, as

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taught by Stormer in the Kapur apparatus, since the use thereof would have improved sealing between the first and second hub.

Claims 11-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kapur '283 in view of legal precedent.

Regarding claim 11-13, Kapur discloses the invention as recited above; however, Kapur fails to disclose a second housing rigidly mounted to the first housing. It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilize the second housing rigidly mounted to the first housing, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co., Inc.*, 193 USPQ 8 (7th Cir. 1977).

Regarding claims 14, 15 and 18-20, Kapur further discloses the inlets (70, 48, 74) and the outlets (73, 49, 77) are cavities formed in the respective radially inwardly facing surfaces, and each of said cavities is in fluid communication with a corresponding passage formed through the housing; a longitudinal passage (not numbered; however, clearly seen in Fig. 1) formed through the housing (7), the passage being in fluid communication with each inlet and the source; a first/second end cap (not numbered; however, clearly seen in Fig. 1) being mounted to a first/second end of the housing (7), the end caps forming closures for the chambers; the first end cap has a recess (not numbered; however, clearly seen in Fig. 1) for receiving at least one protrusion formed on one of the hubs (27, 28, 29); each of said hubs has a reduced-diameter necked region forming a shoulder (see Fig. 4), and an aperture is formed in each wall at each chamber for rotatably receiving said necked region of a corresponding hub (27, 28, 29).

Prior Art

The IDS (PTO-1449) filed on July 23, 2003 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of four patents: Satz (U.S. Patent Number 4,009,573), Stout (U.S. Patent Number 4,299,546), Oshima et al. (Publication Number JP 63-263284), and Yokoi (Publication Number JP 01-211684), each further discloses a state of the art.

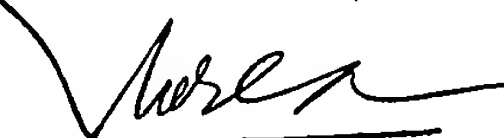
Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT


Theresa Trieu
Primary Examiner
Art Unit 3748